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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,318	07/09/2001	Keith Brookes Spong	(1170/39207)	4797

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EXAMINER

TRAN, HANH VAN

ART UNIT PAPER NUMBER

3637

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,318

Applicant(s)

SPONG ET AL.

Examiner

Hanh V. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 13 and 15 is/are rejected.
- 7) ☒ Claim(s) 3-12 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This is the First Office Action on the Merits from the examiner in charge of this application.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

3. Claims 1-15 are objected to because of the following informalities: (1) . Appropriate correction is required. Claims 1-12, line 1, "Door state" should be "A door state". Claim 3, line 2, "delay means which provide" should be "delay means which provides". Claim 13, line 2, "door state" should be "a door state". Claims 14 and 15, line 1, "door state" should be "a door state".

4. Claims 4-12, and 14 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

5. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. For the purpose of this examination, the claim will be examined as best understood.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 5,293,020 to Han et al.

Regarding claims 1 and 13, Han et al discloses a home appliance comprising all the elements recited in the above listed claims including a cabinet, a door hingedly connected to said cabinet, and a door state changing apparatus; wherein said door state changing apparatus comprises (1) permanent magnet means 20 attached to a door, (2) electromagnet means 30 attached to a door frame, (3) door position detection means 40, (4) user interface means 80, and (5) control means 60.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Han et al in view of JP 63040.

Regarding claim 2, Han et al discloses all the elements as discussed above except for the electromagnet means being de-energized when the door position detection means indicates that the door is in the closed position.

JP 63040 teaches the idea of a home appliance comprising a cabinet, a door hingedly connected to the cabinet, means for closing and opening the door; wherein said closing and opening means comprises magnet means and electromagnet means, with the electromagnet means is inactivated, i.e., de-energized, when the door is closed in order to provide energy saving. Therefore, it would have been obvious to modify the structure of Han et al by having the electromagnet means being de-energized when the door position detection means indicates that the door is in the closed position in order to provide energy saving, as taught by JP 63040, since both teach alternate conventional home appliance structure, having magnet and electromagnet means, thereby providing structure as claimed.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Germany 3837547 to Maier in view of Han et al.

Maier discloses a refrigerator comprising a magnet 22 fitted on a door cooperating with an electromagnetic 24 within the refrigerator being coupled to a current source via a touch-control button in order to initiate door release. The differences being that Maier does not disclose door position detection means, user interface means 80, and control means 60.

Han et al teaches the idea of a cabinet having a door hingedly connected thereon, and a door changing apparatus comprising (1) permanent magnet means 20 attached to a door, (2)

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electromagnet means 30 attached to a door frame, (3) door position detection means 40, (4) user interface means 80, and (5) control means 60 in order to provide a tight seal between the door and the cabinet, thereby saves energy. Therefore, it would have been obvious to modify the structure of Maier by providing (1) permanent magnet means 20 attached to a door, (2) electromagnet means 30 attached to a door frame, (3) door position detection means 40, (4) user interface means 80, and (5) control means 60 in order to provide a tight seal between the door and the cabinet, thereby saves energy, as taught by Han et al, since both teach alternate conventional home appliance structure, thereby providing structure as claimed.

Allowable Subject Matter

12. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or fairly suggest, whether taken alone or in combination with other references, the control means, in combination with all the elements recited in the preceding claims, includes delay means which provides a time delay between the door position detection means detecting the closed state and de-energizing the electromagnet means.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Plunkett et al, Woo, Berglund et al, Englund, Franck, Mori et al, Maeda, and Nakabe all show structures similar to various elements of applicant's disclosure.


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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh V. Tran whose telephone number is (703) 308-6302. The examiner can normally be reached on Monday-Thursday, and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (703) 308-2486. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

HVT
September 30, 2003


Hanh V. Tran
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